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application, and the Commission would be required to give Cornell a 20-day period to comment on the application. Cornell strongly implies in its petition that it would oppose the grant of all such applications because it claims that operation of its radio/radar telescope near Arecibo is jeopardized by any radio noise at any point in the radio spectrum:

"[R]adio astronomy telescopes must be protected from [receiving] ambient radio noise. . . [because the c]osmic signals they study are extremely weak [as illustrated by the fact that]. . . all the radio power collected by all the radio telescopes on earth since radio waves from space were discovered in 1932 would not suffice to light a single light bulb."^{2/}

If Cornell's proposal were adopted, the university would gain substantial leverage to thwart the grant of licenses for almost every type of fixed radio transmitter in Puerto Rico, including transmitters which local exchange carriers like PRTC use in order to provide basic telephone service. For example, PRTC could be precluded from improving telephone service with new and modified transmitters in the point-to-point microwave service, the rural radio service, and the basic exchange telephone radio service; it also could be precluded from improving coverage provided by its cellular system through modifications to its existing cellular

^{2/} Pet. at 3. See also "Tech. Statement" attached to Ret. at 3 (interfering signals can be far removed from the fundamental frequency [on which the interfering transmitter operates;] for instance, observers have encountered [interference from] the 13th to 16th harmonics of FM stations. . . .")

licenses; and it could be precluded from obtaining new paging licenses.^{3/}

ARGUMENT

The Commission should dismiss Cornell's petition because the privileged status the university seeks under FCC rules as an objector to license applications is grossly overbroad. First, Cornell seeks a far greater right to block license applications than the FCC has awarded to any other radio research facility in the past two decades. For example, although the Commission adopted a rule in 1972 requiring license applicants proposing transmitters near Boulder, Colorado to coordinate their proposals with the Department of Commerce in order to minimize radio interference to a government radio laboratory near Boulder, the right which that rule gives the Commerce Department to block transmitter applications is far narrower than the right which Cornell seeks for

^{3/} Although Cornell claims that its purpose in seeking the rule it proposes is only to make sure it knows about applications for transmitters in Puerto Rico, in fact Cornell's purpose is not so benign because the FCC already issues public notices on a daily basis which announce the filing of all transmitter applications, and Cornell states that it reviews these public notices carefully. See Cornell's "Reply to Comments" at 3. Moreover, FCC rules already give interested parties, including Cornell, a right to file an objection to the grant of any license application which would interfere with the conduct of the objector's business. Cornell's real purpose is to create an inference in FCC regulations that its radar at Arecibo deserves special -- indeed extraordinary -- protection from radio interference, thus giving the university substantial leverage to block the grant of applications to construct any fixed transmitter or modify any existing fixed transmitter anywhere in Puerto Rico.

power to that facility only if the applicant proposes to construct a transmitter within 1.5 miles of the Boulder laboratory.^{6/}

Adopting a rule that gives Cornell a privileged status as an objector to applications for transmitters in Puerto Rico in order to protect the Arecibo radar from interference also is overbroad because it almost certainly would result in a deluge of petitions seeking similar protection for numerous other radars. Indeed, operators of seven observatories filed comments in support of the Cornell petition perhaps, in part, because they know that it would be easier to obtain the same status for their sites that Cornell seeks for the Arecibo radar if the FCC adopts the rule that Cornell requests.^{7/} It may not be legally possible for the Commission to

^{6/} Indeed, the rule designed to protect the Boulder laboratory states that an applicant proposing a radio transmitter between 1.5 and three miles from the lab is not even required to notify the lab of its application unless the transmitter would operate at 50 watts effective radiated power ("ERP"); notification is not required for a transmitter to be located between three and 10 miles from the laboratory unless it would operate at 1,000 watts ERP; notification is not required for a transmitter located between 10 and 50 miles from the laboratory unless it would operate with at least 2,500 watts ERP, and notification is not required for any transmitter more than 50 miles from the laboratory. See, e.g., Section 22.113(b)(1). In 1979, the Commission adopted a rule to protect the FCC's own radio monitoring stations that is nearly identical to the rule which protects the Boulder testing laboratory. See Report and Order in GEN. Dkt. No. 78-365, 46 Rad. Reg. (P&F) 1171 (1979).

^{7/} See letter by S.R. Kulkarni on behalf of Owens Valley Radio Observatory (received by FCC Feb. 18, 1993); letter by J.P. Huchra on behalf of Smithsonian Astrophysical Observatory and Harvard College Observatory (Feb 14, 1993); letter by William M. Irvine on behalf of Five College Radio Astronomy Observatory (Feb. 10, 1993); letter by Martin S. Roberts on behalf of Nat. Radio Astronomy Observatory (Feb . 7, 1993); letter by Carl Heiles on behalf of Leuschner Observatory (Feb. 8, 1993); letter by Frank N. Bash on behalf of McDonald Observatory (Feb. 5, 1993).

justify granting such protection for the Arecibo radar while rejecting it for other radars under its legal obligation to treat similarly situated petitioners equally, but even if it is possible for the agency to justify giving a privileged status only to the Arecibo radar, surely the Commission would prefer not to be forced to justify disparate regulatory treatment for different radars.

Not only is the rule proposed by Cornell overbroad, two facts also show that the university has not provided evidence sufficient to justify issuance of a notice of proposed rulemaking recommending adoption of any rule that provides Cornell with any right to interference protection beyond the rights it already possesses. First, Cornell casts serious doubt on its need for additional protection from the FCC by admitting that it is at present redesigning the Arecibo radar in order to "suppress or eradicate the access of interfering signals to the [radar's] receiving systems" and that it also is "pursuing other technical solutions for dealing with RFI problems that do not require FCC intervention."^{8/} Second, Cornell admits that Puerto Rico law already gives it the right to block transmitters within four miles of the Arecibo radar site and a right to prohibit construction of any microwave link that runs through or is directed at the eight mile diameter of this protection zone. Indeed, Puerto Rico law appears to give Cornell substantially greater protection than FCC rules provide to the Boulder laboratory and the FCC's own monitoring stations. As indicated in footnote six, FCC rules do

^{8/} See Pet. at 5; "Tech. Statement" attached to Pet. at 8.

not give these latter two facilities the right automatically to block construction of any radio transmitter unless it would be located within 1.5 miles of the protected facility.

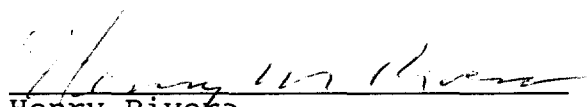
CONCLUSION

The Commission should deny Cornell's petition because the rule it seeks plainly is overbroad, and Cornell also has failed to make a prima facie case justifying more limited protection than that which it seeks.

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CERTIFICATE OF SERVICE

I, hereby certify on this 25th day of March, 1993, that copies

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